Amendments to the Specification:

Please replace paragraph [0008] with the following amended paragraph:

[0008] Performance of many known micro-resistivity tools in these non-conductive oil-based mud systems was seriously degraded. The high-resistance drilling fluid prevents the flow of current. To solve this problem, a resistivity tool may be placed against the borehole wall, but an imperfect contact or high-resistance mud cake prevents any current flow that would occur perpendicular to the borehole wall. Put in terms of an electrical circuit, the mud cake resistivity R_m (which may be approximated as having infinite resistivity) is in series with the formation resistivity [[R_f]] R_t as shown in Figure 3A. The total circuit resistance may be considered about infinite for this purpose, effectively preventing current flow. Without a flow of current, no resistivity measurement can be made and thus measurements from a current emitting resistivity tool were rendered either useless or much less reliable. It was thought that the advantages of microresistivity borehole imagers to collect information regarding the borehole might be lost when using non-conductive drilling fluids.

Please replace paragraph [0042] with the following amended paragraph:

[0042] According to one embodiment of the invention, monitor electrode M may comprise a series of monitor electrodes as illustrated in Figure 6B, so long as the series of monitor electrodes are placed below current source N. In another embodiment of the invention the monitor electrode M may comprise a series of monitor electrodes so long as the series of monitor electrodes are placed above current return P. Referring to Figure 6B, in one embodiment of the invention, a current at a frequency of up to about 100 KHz would be generated at the current source N. A potential may be measured at the monitor electrode M with respect to a common reference (e.g., a ground) at a distance from the current source ~~P~~N, the current return ~~N~~P, and the monitor electrode M. The potential measured at the monitor electrode M is divided by the total injected current from current source N, and the result multiplied by a factor K (the tool constant well known by one having ordinary skill in the art) to calculate apparent resistivity detected by the tool. Although the embodiment of Figure 6B has a conductive strip or a conductor for current source ~~M~~ N and for

current return P, other embodiments of the invention may have one or more buttons or one or more point sources for current source ~~M~~ N and/or for current return P. Also, monitor electrode M may comprise any suitable construction such as a conductive strip or one or more buttons or pins.

Please replace paragraph [0043] with the following amended paragraph:

[0063] As can be seen in Figure 18, where there exists a stand off created by, e.g., a mud cake, or where contact with the borehole wall is less than ideal, a large difference ~~(indicate this difference by a reference numeral)~~between actual formation resistivity 1010 and measured resistivity 1420 may exist in the tool response for the shallow and deep modes of operation. If the resistivity data taken by a tool in mode having a shallow depth of investigation closely aligns with the data taken by the tool in a mode having a deep depth of investigation (except for shoulder effects), then the operator can be confident that little or no standoff exists. Where little or no standoff exists, the measured resistivity is that of the formation surrounding the borehole (where there is an invaded formation, measured resistivity Rxo). It is therefore desirable for the resistivity tool to measure at multiple depths into the formation around the borehole between transmitters and receivers. This is the radial profiling of the formation.

Please add the following paragraph [0066.1] between paragraphs [0066] and [0067]:

[0066.1] Figure 20 illustrates a flow diagram to implement a first oil based mud imager method according to at least some embodiments of the invention. In particular, a current is transmitted from the current source (block 2001), and the current is received at a current return (block 2002). A voltage measurement is taken at a monitor electrode more remote from the current source than the current return (block 2003). A current is transmitted from a second current source (block 2004), and the current is received at a second current return (block 2005). A voltage measurement is taken at a monitor electrode more remote from the second current source than the second current return (block 2006). Thereafter, a formation resistivity is calculated (block 2007).

Please add the following paragraph [0066.2] between paragraphs [0066] and [0067], and after [0066.1]:

[0066.2] Figure 21 illustrates a flow diagram to implement a method in accordance alternative embodiments. In particular, resistivity is measured at a first depth into the formation (block 2101). Moreover, resistivity is measured at a second depth into the formation (block 2102). Thereafter, a determination is made as to the presence/magnitude of a standoff from the borehole wall for a resistivity tool (block 2103).